BRITISH COLUMBIA

# BC STATS

Ministry of Management Services

# Infoline

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Issue: 03-03

January 17, 2003

- **Investment in non-residential buildings down 8.9% in 2002**
- **BC has the second highest crime rate among provinces**
- **Lumber production continues to grow to keep up with residential construction**

## The Economy

- **Investment in non-residential building construction rose slightly (+0.3%, seasonally adjusted) in the fourth quarter of 2002 after falling (-2.2%) in the third.** Victoria (+7.8%) saw a sizeable increase in investment, reaching $53 million while spending in Vancouver (-0.8%) slipped to $361 million. Nation-wide, investment rose 1.2% reaching a record high ($6.4 billion), fuelled by spending in the public sector. Manitoba (+7.9%) saw the largest percentage increase of the provinces, while New Brunswick (-11.7%) recorded the steepest decline.

  *Source: Statistics Canada*

- **Despite increasing marginally at the end of the year, spending on non-residential building projects was weak in 2002, declining 8.9% after slipping 5.4% in the previous year.** Investment in industrial (-23.6%) buildings remained sluggish, while spending on commercial projects (-11.4%) fell back after posting a solid gain in 2001. Investment in institutional buildings was up 4.3% over 2001.

  *Source: Statistics Canada*

- **Exports of BC products rose 0.2% (not seasonally adjusted) in November, compared to November 2001.** Forest product exports lost ground (-3.1%), and agriculture exports slumped, falling 11.0% from the same month of 2001. Exports of machinery and equipment (+11.4%) and industrial products (+19.2%) saw strong growth.

  *Source: Statistics Canada*

- **BC sawmills increased their production 35.3% in October, compared to the same month last year.** Shipments of BC lumber were up 21.4% following a national trend that saw shipments rise in all lumber producing provinces except New Brunswick (-3.2%).

  Canada-wide, sawmill production increased 20.4% compared to October 2001. The sustained activity in residential construction is still boosting sawmill production. Canadian sawmills increased the pace of production from a smaller number of plants in order to lower operating costs to try to cope with the penalties imposed by the United States. Year-to-date production is also up (+3.2%) compared with last year. *Source: Statistics Canada*

- **There were 717 consumer bankruptcies registered in the province in November, down (-9.8%) from 795 in the same month last year.** Consumer bankruptcies declined in most parts of the country, falling 11.3% (to 6,355) at the national level. The Atlantic provinces were the only ones that saw increases in bankruptcies in November. New Brunswick (+14.5%), Nova Scotia (+4.0%), and Prince Edward Island (+45.5%) all experienced more consumer bankruptcies than last year.

  The number of business bankruptcies registered in the province totalled 61 in November, down significantly from 109 in November 2001. The transportation and storage industry (10), and construction industry (8) had the most bankruptcies, followed by the business service (7) and accommodation food and beverage service (7) industries. The total liabilities of insolvent firms in BC were $27.1 million in November. *Source: Industry Canada*

- **In November, new motor vehicle sales fell 3.6% (seasonally adjusted) in British Columbia and the territories.** There were 16,140 new vehicles purchased in November, down from 16,737 in October.

**Report** High Technology Input Indicators

Did you know...

Canadian livestock consumed 24.3 million metric tonnes of grain-based feed and 45.3 million tonnes of roughage in 1999

Sales were down in most provinces except Prince Edward Island (+2.1%), Nova Scotia (+0.5%) and Manitoba (where sales were unchanged). The steepest declines were recorded in New Brunswick (-10.1%), followed by Quebec (-9.3%). Sales in New Brunswick have been dropping since the spring of 2002. Across Canada, consumers bought 72,630 new cars, a decrease of 8.0%. This fall was largely due to fewer domestic cars being sold (-9.9%) as import car sales decreased at a slower rate (-3.9%). New truck sales slipped only slightly in November (-0.9%) to 68,244.

*Source: Statistics Canada*

## Crime

- **BC's crime rate increased for the first time in a decade in 2001, rising to 114 crimes per 1,000 population.** The 2001 crime rate was up from 113 in 2000. Despite this small increase, the crime rate in BC has declined drastically since 1991 when it peaked at 152. BC's crime rate was higher than any other province in 2001, with the exception of Saskatchewan.

  In 2001, one in four reported crimes were cleared (solved). Violent crimes were the most often cleared (59%) while property crimes were least likely to be solved (14%). Between 1992 and 1999, the percentage of violent crimes cleared ranged from 68% to 71% but dropped significantly in 2000 and 2001. Thirty-three percent of other crimes were solved.

  Of the 64,960 people charged in BC during 2001, 41% were accused of property crimes and 32% were charged with violent crimes. By comparison, violent crimes represent only 11% of reported crime, while property crimes account for 56% of reports. In 2001, 16% of people charged were young offenders (aged 12 to 17). The number of charges against youths has decreased steadily over the past decade, from 65 per 1,000 in 1992, to 32 in 2001. *Source: Min. of Public Safety and Solicitor General*

## Internet Service Providers

- **In 2001, the Canadian Internet Service Provider industry generated $1.27 billion in total operating revenues, an increase of 27% from 2000.** The number of people employed in the industry grew (+13%) to 7,357. The average annual salary of these workers jumped 27% to $61,700. Operating expenses increased (+36%) to $1.55 billion with telecommunications remaining the largest expense item. Losses continued to mount in 2001 as the operating margin in the industry was -22.2% versus -13.9% in 2000.

  *Source: Statistics Canada*

## Agriculture

- **The value of agricultural production in British Columbia climbed 8.2% to $2.7 billion in 2001.** Nation-wide, the value of production reached a record high of $45.5 billion, an increase of 5.7% from 2000. The average annual increase in the value of agricultural production in Canada from 1991 to 2001 was 5.4%, compared to ?.1% from 1981 to 1991.

  *Source: Statistics Canada*

- **Farm sector equity in British Columbia fell 1.2% to $11.7 billion in 2001** The drop was due to total assets declining 0.4% to $13.4 billion while total liabilities rose 5.7%. Nation-wide, asset values increased less rapidly than debt causing total Canadian farm equity to edge down 0.1%. *Source: Statistics Canada*

## Deaths

- **During the second quarter of 2002, 228 people in the province lost their lives due to accidents (172) or from other external causes (56).** Falls (64) were the most common reason for accidental deaths, followed by motor vehicle accidents (58). In addition, 9 people drowned, 4 were poisoned, and 3 died from burns or in a fire. Other types of accidents resulted in another 34 deaths during this period, while 49 people committed suicide. There were 6 homicide victims during the period from April to June.

  *Source: BC Vital Statistics Agency*

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Infoline Report

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# High Technology Input Indicators

**Introduction**

There is clear value in monitoring the output of the high technology sector, but informed policy-making requires knowledge about the processes that give rise to that output as well. The high technology sector is a complex system with many players and interactions. Understanding this system is a matter of identifying the various parts, and collecting information that shows how these parts behave and interact over time.

The input indicators cover key aspects of the educational, business, government, external, and labour sectors from the point of view of their impact on high technology firms. The position of British Columbia in relation to the other major high technology provinces remains below average, despite strong relative growth in some indicators over the past two or three years.

**Interprovincial Comparisons**

The indicators have, where possible, been presented for the provinces of Alberta, Ontario, and Quebec as well as British Columbia. Comparisons to other provinces are useful as they show the range of experience in comparative and competitive jurisdictions. These four provinces have the largest general economies, and they have the most extensive high technology sectors. Based on 2001 data, the share of high tech employment for these provinces ranges from 2.9% to 4.6% of total employment with the BC share being the lowest.

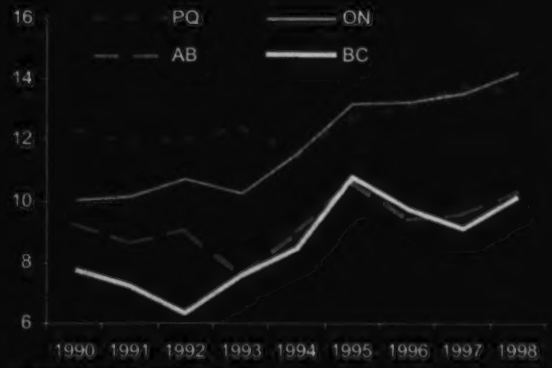
**The Education Sector**

A high level of education suggests a more knowledgeable population base that would be sufficiently proficient to work in the high technology market. Also, higher levels of educational attainment enable high technology firms to draw from a broader, more highly developed skill base.

The percentage of the population aged 15 and older with a high school diploma and the percentage with post-secondary credentials both showed steady increase across Canada during the 1990s and in the most recent reporting year. Each year the number of people completing high school and the number of people continuing into post-secondary education facilities increases. While BC leads the high technology provinces in the largest portion of its population with a high school diploma, it falls short of the other three provinces in the percentage of its population with post-secondary credentials.

The number of BC graduates with a bachelor's degree in Computer Science per 100,000 persons was low compared to the Canadian average during most of the 1990s, despite increasing over most of this period. In 1997, the number of computer science graduates increased in all provinces except BC, but then rebounded in 1998 to bring BC much closer to Alberta.

*BC has the lowest number of computer science bachelor degrees awarded per 100,000 persons aged 15 years and older*




Source: Statistics Canada

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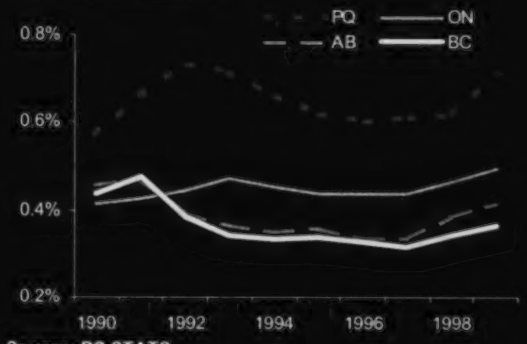
Research and development (R&D) at universities contributes to the high technology sector's impact on the economy. Universities are increasing partnerships with industry to bring the products and processes of R&D to market. The ratio of R&D performed by the higher education sector to GDP is an indicator of the proportional investment in R&D by this sector relative to the size of the overall economy. A higher proportion of investment is likely to lead to higher rates of discovery. The higher education sector, which does not include the private non-profit sector, performed $5.2 billion worth of R&D in 1999. This accounted for over 0.5% of Canada's GDP that year. The ratio of R&D performed by the higher education sector to provincial GDP was highest in Quebec at just over 0.7% in 1999. Alberta (0.41%) and BC (0.37%) were lower than the Canadian average (0.53%).

*The ratio of higher education performance of R&D to GDP is weakest in BC*



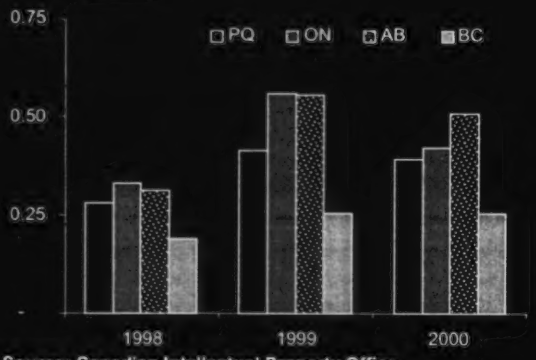

Source: BC STATS

**The Business Sector**

British Columbia returns average or below average ratings in all of the business stimulus indicators compared to other Canadian provinces. However, BC has experienced upward trends in some of these indicators over the past few years where other provinces have been fairly constant.

The granting of patents indicates the success of R&D. Through the 1990s, BC fell behind other high technology provinces in both patent applications and patents awarded per 10,000 persons. Patents awarded per 10,000 decreased from 1999 to 2000 in the nation, after showing strong growth between 1998 and 1999.

*BC has the fewest patents awarded per 10,000 persons*

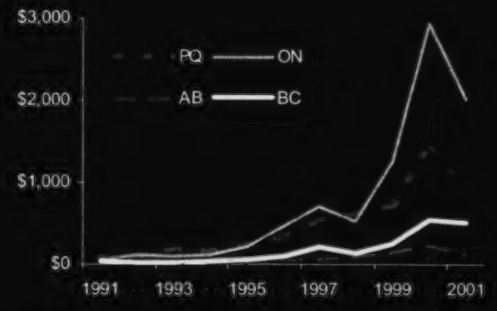



Source: Canadian Intellectual Property Office

Venture capitalists provide the funds for projects that are more often than not involved in the development of a new untested product or process. Venture capital investment by province is therefore a good proxy for both the quality of ventures in a given province as well as the venture capitalists' assessment of the business climate.

Venture capital investment in BC more than tripled between 1998 and 2000 but in 2001, it fell by 7.6%. Ontario had the highest venture capital investment in the last reporting year. However, BC managed to increase its share of the national total from 10.2% to 13.5% last year despite investments falling dramatically at the national level.

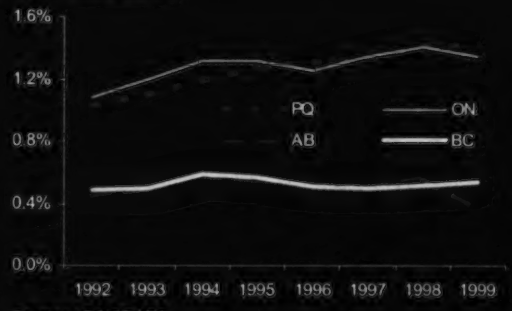
*BC gains more of the national share of venture capital investment by investee province ($ millions)*




**Source: Canadian Venture Capital Association**

The ratio of R&D performed by business to GDP is an indicator of the proportional investment in R&D by the business sector relative to the size of the overall economy. It is assumed that a higher proportion is likely to lead to higher rates of discovery. The business sector in Canada performed $9.8 billion worth of R&D in 1999. During the 1990s, the ratio of business R&D to provincial GDP was much higher in Quebec and Ontario and much lower in BC and Alberta than the Canadian average. In the most recent year, the ratio increased in BC.

*The ratio of business performance of R&D to GDP rises in BC*

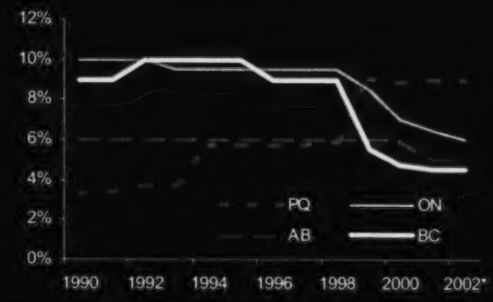



**Source: BC STATS**

**The Government Sector**

The government sector affects high technology firms by providing a regulatory, tax, and infrastructure environment for the private sector to operate within by funding and directly performing R&D. Lower levels of taxation attract investment and a skilled workforce, which are both essential to the high technology sector.

*The small business tax rate in BC remains the lowest amongst the high tech provinces*

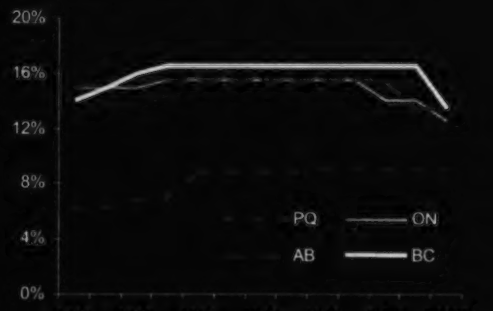



**Source: BC Ministry of Finance (*2002 rates are projected)**

British Columbia's small business tax rate declined in 1996 and 1999 through 2001 becoming the lowest small business tax rate of the high technology provinces. Quebec's tax rate increased in 1999 and is now the highest among the four provinces.

British Columbia's corporate tax rate rose in the early 1990s, then in 2001 BC initiated corporate tax cuts similar to the recent cuts in Alberta and Ontario. Quebec has the lowest rate of the four provinces although it has been rising over the past ten years.

*BC has the highest general corporate tax rate of the four provinces*

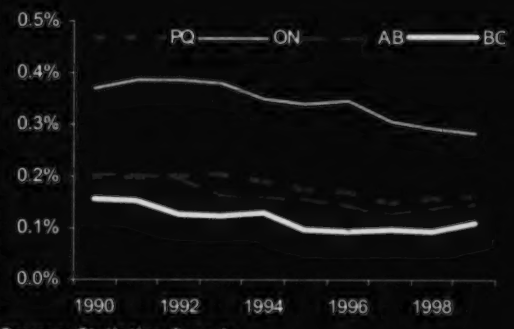



**Source: BC Ministry of Finance (*2002 rates projected)**

Government tends to fund much more R&D than it actually performs. However, in some fields, governments do maintain research personnel in order to provide independent testing of products, processes and practices. The purpose of most internal government research is not necessarily focused on innovation, but serves a peer review function. Significant innovations developed by government researchers are often spun-off to the private sector. The ratio of government R&D to GDP is an indicator of the proportional investment in R&D by the government sector relative to the size of the overall economy.

Ontario has maintained the highest ratio of government R&D to GDP during the 1990s. BC's ratio has been the lowest of the provinces, at less than half the Canadian average between 1992 and 1999. The ratios for Quebec and Alberta increased slightly in 1998.

*The ratio of combined federal and provincial performance of R&D to GDP in BC remains lower than average*



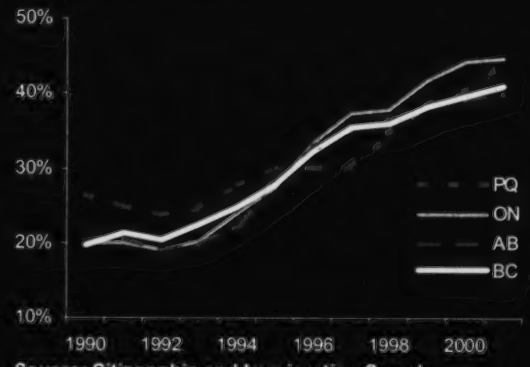

Source: Statistics Canada

**The External Sector**

The British Columbia economy benefits from being part of a world system that provides information, skilled labour, machinery and equipment, and other material inputs, as well as markets for locally-produced products. BC is also a provider of these resources to foreign countries and to other provinces.

Educational attainment of immigrants measures the flow of educated, skilled workers into British Columbia. These workers often bring knowledge of other business practices and business opportunities, as well as languages. Immigrants also offset the loss of skilled workers who move to other provinces or out of Canada. The percentage of educated immigrants grew dramatically in the last 10 years in Canada. Ontario had the highest percentage of immigrants with 16 or more years of education (45%), while the other provinces had between 40% and 44% in 2001.

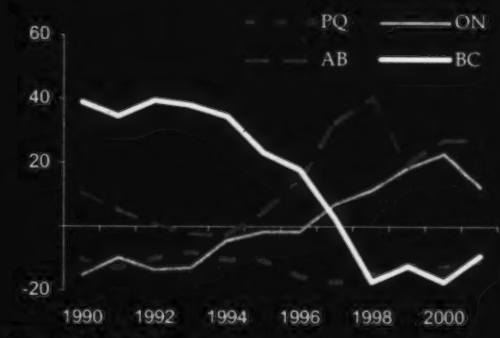
*The percentage of immigrants aged 25 years and older with 16 or more years of education grows steadily in all four provinces*




Source: Citizenship and Immigration Canada

Workers in Canada are much more free to move within the borders of the country than they are internationally. In aggregate, the movements of skilled and educated workers between provinces is a general indicator of both real and perceived economic opportunity. This indicator points to the overall perception of the strength of provincial economies. In the early 1990s, there was a general westward flow of migrants that benefited both BC and Alberta. In recent years however, people began moving east, mostly to Alberta and Ontario, but also to the Atlantic provinces.

*Net inter-provincial migration (thousands)*

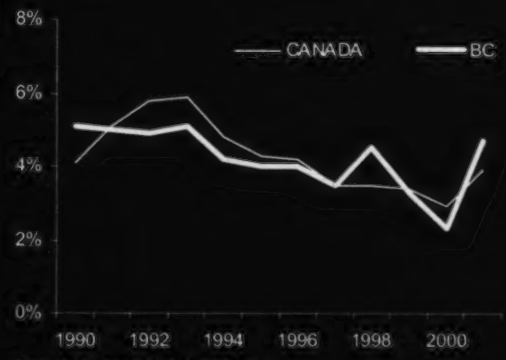



Source: BC STATS

**The Labour Sector**

This section contains a set of indicators that are specific to the labour market but represent a combined impact of the source sectors. A low level of unemployment in natural and applied sciences occupations is desirable because some components of this group (e.g. computer scientists) are the engines of innovation in the high technology economy. Higher levels of unemployment in this group indicate idle intellectual capital, which has the effect of slowing the overall rate of innovation.

*BC's unemployment rate for natural and applied sciences rises above the national average*

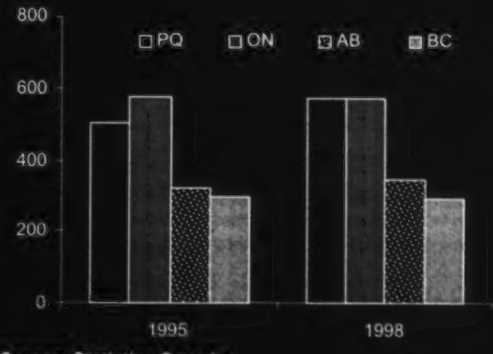



Source: Statistics Canada

During the 1990s, BC usually had a lower rate of unemployment for natural and applied science occupations than the Canadian average. In 2000, the BC unemployment rate for natural and applied sciences reached a decade low of 2.3%, the lowest rate in the nation. However, the unemployment rate rose above the national level the following year.

The absolute number of researchers and technicians engaged in research is an important determinant to the volume of scientific and technical discoveries that may result in patent applications, and later, in the birth of new firms or the growth of existing firms. British Columbia's workforce of researchers and technicians was the fourth largest per 100,000 persons across Canada in 1998, up from an eighth place rank in 1995. While the number of researchers in BC increased only slightly in 1998, several other provinces' total number of researchers decreased.

*BC lags behind the high tech provinces in the total research workforce per 100,000 persons*




Source: Statistics Canada

**Summary**
The picture of British Columbia that emerges from the input indicators is varied. In some areas, British Columbia is strong when compared to other provinces, and has shown strong growth over the past decade. In other areas, performance has lagged. In this way, the detailed indicators offer concrete guidance about potential government policies and industry growth strategies.

BC Stats recognises the importance of providing the latest information available. We are working to improve the frequency of release on our statistics on the high technology sector. Watch our web site [www.bcstats.gov.bc.ca], or future editions of *Business Indicators*, for progress in these areas.

# Infoline

January 17, 2003

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also on the Internet at www.bcstats.gov.bc.ca

## BC at a glance . . .

| POPULATION (thousands) | Jul 1/02 | % change on one year ago |
|---|---|---|
| BC | 4,141.3 | 1.0 |
| Canada | 31,414.0 | 1.0 |
| **GDP and INCOME** | | |
| *(BC - at market prices)* | 2001 Revised | % change on one year ago |
| Gross Domestic Product (GDP) *($ millions)* | 130,859 | 1.2 |
| GDP *($ 1997 millions)* | 123,912 | -0.2 |
| GDP *($ 1997 per Capita)* | 30,252 | -1.1 |
| Personal Disposable Income *($ 1997 per Capita)* | 19,513 | 1.2 |
| **TRADE ($ millions, seasonally adjusted)** | | % change on prev. month |
| Manufacturing Shipments - Oct | 2,936 | 2.2 |
| Merchandise Exports - Oct | 2,550 | 2.9 |
| Retail Sales - Oct | 3,394 | 1.6 |
| **CONSUMER PRICE INDEX** | | 12-month avg |
| *(all items - 1992=100)* | Nov '02 | % change |
| BC | 118.9 | 2.1 |
| Canada | 120.8 | 2.0 |
| **LABOUR FORCE (thousands)** | | % change on |
| *(seasonally adjusted)* | Dec '02 | prev. month |
| Labour Force - BC | 2,176 | -0.3 |
| Employed - BC | 1,994 | -0.2 |
| Unemployed - BC | 182 | -2.2 |
| | | Nov '02 |
| Unemployment Rate - BC *(percent)* | 8.3 | 8.5 |
| Unemployment Rate - Canada *(percent)* | 7.5 | 7.5 |
| **INTEREST RATES (percent)** | Jan 15/03 | Jan 16/02 |
| Prime Business Rate | 4.50 | 3.75 |
| Conventional Mortgages - 1 year | 4.90 | 4.35 |
| - 5 year | 6.45 | 6.85 |
| **US/CANADA EXCHANGE RATE** | Jan 15/03 | Jan 16/02 |
| *(avg. noon spot rate)* Cdn $ | 1.5352 | 1.5947 |
| US $ *(reciprocal of the closing rate)* | 0.6507 | 0.6253 |
| **AVERAGE WEEKLY WAGE RATE** | | % change on |
| *(industrial aggregate - dollars)* | Dec '02 | one year ago |
| BC | 676.45 | 5.1 |
| Canada | 651.35 | 1.6 |

**SOURCES:**

Population, Gross Domestic Product, Trade, Prices, Labour Force, Wage Rate } Statistics Canada

Interest Rates, Exchange Rates: Bank of Canada Weekly Financial Statistics

For latest Weekly Financial Statistics see www.bankofcanada.ca

### Released this week by BC STATS

- Labour Force Statistics, December 2002

### Next week

- Migration Highlights, 3rd Quarter 2002
- Immigration Highlights, 3rd Quarter 2002
- Consumer Price Index, December 2002

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